

Hide Items **Restore** **Clear** **Cancel**

DATE: Thursday, April 22, 2004

Hide?	Set Name	Query	Hit Count
<i>DB=PGPB,USPT,USOC,EPAB,JPAB,DWPI; THES=ASSIGNEE; PLUR=YES; OP=ADJ</i>			
<input type="checkbox"/>	L7	L1 and marine	57
<i>DB=USPT,USOC,EPAB,JPAB,DWPI; THES=ASSIGNEE; PLUR=YES; OP=ADJ</i>			
<input type="checkbox"/>	L6	L2 and marine	40
<input type="checkbox"/>	L5	L1 and marine	40
<input type="checkbox"/>	L4	L1 and marine organism	9
<input type="checkbox"/>	L3	L2 and marine organism	9
<input type="checkbox"/>	L2	(anti adj3 fouling) and (enzyme or oxidase)	75
<i>DB=PGPB,USPT,USOC,EPAB,JPAB,DWPI; THES=ASSIGNEE; PLUR=YES; OP=ADJ</i>			
<input type="checkbox"/>	L1	(anti adj3 fouling) and (enzyme or oxidase)	117

END OF SEARCH HISTORY

Clear

Generate Collection

Print

Fwd Refs

Bkwd Refs

Generate OACS

Search Results - Record(s) 1 through 20 of 57 returned.

1. Document ID: US 20040029812 A1

Using default format because multiple data bases are involved.

L7: Entry 1 of 57

File: PGPB

Feb 12, 2004

PGPUB-DOCUMENT-NUMBER: 20040029812

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20040029812 A1

TITLE: Furanone derivatives

PUBLICATION-DATE: February 12, 2004

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Boddupalli, Sekhar	San Jose	CA	US	
Walkinshaw, Gail	San Jose	CA	US	
Wang, Bing	Cupertino	CA	US	

US-CL-CURRENT: 514/18; 514/19, 514/217.03, 514/227.8, 514/231.5, 514/254.1,
514/326, 514/365, 514/374, 514/397, 514/422 , 514/473, 514/99

[Full](#) [Title](#) [Citation](#) [Front](#) [Review](#) [Classification](#) [Date](#) [Reference](#) [Sequences](#) [Attachments](#) [Claims](#) [RQMC](#) [Drawn D](#)

2. Document ID: US 20040019143 A1

L7: Entry 2 of 57

File: PGPB

Jan 29, 2004

PGPUB-DOCUMENT-NUMBER: 20040019143

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20040019143 A1

TITLE: Polymer composites and methods for making and using same

PUBLICATION-DATE: January 29, 2004

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Koloski, Timothy S.	West Amherst	NY	US	

3. Document ID: US 20040009159 A1

L7: Entry 3 of 57

File: PGPB

Jan 15, 2004

PGPUB-DOCUMENT-NUMBER: 20040009159

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20040009159 A1

TITLE: Coatings with enhanced microbial performance

PUBLICATION-DATE: January 15, 2004

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Polsenski, Martin J.	Jacksonville	FL	US	
Leavitt, Richard I.	Ponte Vedra Beach	FL	US	

US-CL-CURRENT: 424/93.45

[Full](#) | [Title](#) | [Citation](#) | [Front](#) | [Review](#) | [Classification](#) | [Date](#) | [Reference](#) | [Sequences](#) | [Attachments](#) | [Claims](#) | [KOMC](#) | [Drawn D](#)

4. Document ID: US 20030203991 A1

L7: Entry 4 of 57

File: PGPB

Oct 30, 2003

PGPUB-DOCUMENT-NUMBER: 20030203991

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20030203991 A1

TITLE: Coating composition for multiple hydrophilic applications

PUBLICATION-DATE: October 30, 2003

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Schottman, Thomas C.	Flemington	NJ	US	
Hennessey, Patrick M.	Fords	NJ	US	
Gruening, Rainer	Basking Ridge	NJ	US	

US-CL-CURRENT: 523/334; 524/430, 524/589

[Full](#) | [Title](#) | [Citation](#) | [Front](#) | [Review](#) | [Classification](#) | [Date](#) | [Reference](#) | [Sequences](#) | [Attachments](#) | [Claims](#) | [KOMC](#) | [Drawn D](#)

PGPUB-DOCUMENT-NUMBER: 20030185870 A1
PGPUB-FILING-TYPE: new
DOCUMENT-IDENTIFIER: US 20030185870 A1

TITLE: Interfacial biomaterials

PUBLICATION-DATE: October 2, 2003

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Grinstaff, Mark W.	Durham	NC	US	
Kenan, Daniel J.	Chapel Hill	NC	US	
Walsh, Elisabeth B.	Durham	NC	US	
Middleton, Crystan	Arlington	VA	US	

US-CL-CURRENT: 424/423; 530/326

[Full](#) | [Title](#) | [Citation](#) | [Front](#) | [Review](#) | [Classification](#) | [Date](#) | [Reference](#) | [Sequences](#) | [Attachments](#) | [Claims](#) | [RQMC](#) | [Draw. D](#)

6. Document ID: US 20030180466 A1

L7: Entry 6 of 57

File: PGPB

Sep 25, 2003

PGPUB-DOCUMENT-NUMBER: 20030180466
PGPUB-FILING-TYPE: new
DOCUMENT-IDENTIFIER: US 20030180466 A1

TITLE: Long lasting coatings for modifying hard surfaces and processes for applying the same

PUBLICATION-DATE: September 25, 2003

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Rohrbaugh, Robert Henry	Hamilton	OH	US	
Goldstein, Alan Scott	Blue Ash	OH	US	
McDonald, Michael Ray	Middletown	OH	US	
O'Connor, Helen Frances	Loveland	OH	US	
Liddle, Heather Anne	Cincinnati	OH	US	
Jensen, John Michael	Wyoming	OH	US	
Sakkab, Nabil Yaqub	Cincinnati	OH	US	

US-CL-CURRENT: 427/372.2; 427/162, 427/407.1

[Full](#) | [Title](#) | [Citation](#) | [Front](#) | [Review](#) | [Classification](#) | [Date](#) | [Reference](#) | [Sequences](#) | [Attachments](#) | [Claims](#) | [RQMC](#) | [Draw. D](#)

PGPUB-DOCUMENT-NUMBER: 20030166237
PGPUB-FILING-TYPE: new
DOCUMENT-IDENTIFIER: US 20030166237 A1

TITLE: Furanone derivatives

PUBLICATION-DATE: September 18, 2003

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Wang, Bing	Cupertino	CA	US	
Zhang, Wei	Santa Clara	CA	US	
Song, Jiangao	Cupertino	CA	US	
Balzo, Ughetta del	Morgan Hill	CA	US	
Brown, Lesley	East Palo Alto	CA	US	
Walkinshaw, Gail	San Jose	CA	US	

US-CL-CURRENT: 514/18; 514/19, 514/471, 514/99, 530/330, 530/331, 549/321

[Full](#) | [Title](#) | [Citation](#) | [Front](#) | [Review](#) | [Classification](#) | [Date](#) | [Reference](#) | [Sequences](#) | [Attachments](#) | [Claims](#) | [RQMC](#) | [Draw. D](#)

8. Document ID: US 20030166237 A1

L7: Entry 8 of 57

File: PGPB

Sep 4, 2003

PGPUB-DOCUMENT-NUMBER: 20030166237
PGPUB-FILING-TYPE: new
DOCUMENT-IDENTIFIER: US 20030166237 A1

TITLE: Antifouling paint composition comprising rosin and enzyme

PUBLICATION-DATE: September 4, 2003

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Allermann, Knud	Rungsted Kyst		DK	
Schneider, Ib	Copenhagen		DK	

US-CL-CURRENT: 435/204; 106/16, 435/200, 435/222

[Full](#) | [Title](#) | [Citation](#) | [Front](#) | [Review](#) | [Classification](#) | [Date](#) | [Reference](#) | [Sequences](#) | [Attachments](#) | [Claims](#) | [RQMC](#) | [Draw. D](#)

9. Document ID: US 20030087338 A1

L7: Entry 9 of 57

File: PGPB

May 8, 2003

PUBLICATION-DATE: May 8, 2003

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Messersmith, Phillip B.	Clarendon Hills	IL	US	
Huang, Kui	Evanston	IL	US	
Lee, Bruce P.	Evanston	IL	US	
Dalsin, Jeffrey	Chicago	IL	US	
Hu, Bi-Huang	Chicago	IL	US	
Friedstat, Jonathan	Wilmette	IL	US	

US-CL-CURRENT: 435/68.1; 527/200

[Full](#) | [Title](#) | [Citation](#) | [Front](#) | [Review](#) | [Classification](#) | [Date](#) | [Reference](#) | [Sequences](#) | [Attachments](#) | [Claims](#) | [KOMC](#) | [Drawn Ds](#)

10. Document ID: US 20020142022 A1

L7: Entry 10 of 57

File: PGPB

Oct 3, 2002

PGPUB-DOCUMENT-NUMBER: 20020142022

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20020142022 A1

TITLE: Method of controlled release and controlled release microstructures

PUBLICATION-DATE: October 3, 2002

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Price, Ronald R.	Stevensville	MD	US	
Schnur, Joel M.	Burke	VA	US	
Schoen, Paul E.	Alexandria	VA	US	
Testoff, Mary	Greenbelt	MD	US	
Georger, Jacque H. JR.	Springfield	VA	US	
Rudolph, Alan	Bowie	MD	US	
Brady, Robert F.	Gaithersburg	MD	US	

US-CL-CURRENT: 424/405; 424/417, 424/450

[Full](#) | [Title](#) | [Citation](#) | [Front](#) | [Review](#) | [Classification](#) | [Date](#) | [Reference](#) | [Sequences](#) | [Attachments](#) | [Claims](#) | [KOMC](#) | [Drawn Ds](#)

11. Document ID: US 20020128561 A1

TITLE: Locating marker/tracer elements detectable by neutron activated analysis within or on carrier microspheres, including microspheres used in biological experimentation

PUBLICATION-DATE: September 12, 2002

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Rheinhardt, Christopher	Worcester	MA	US	
Kemper, W. Scott	San Diego	CA	US	

US-CL-CURRENT: 600/504; 600/3, 600/505

[Full](#) | [Title](#) | [Citation](#) | [Front](#) | [Review](#) | [Classification](#) | [Date](#) | [Reference](#) | [Sequences](#) | [Attachments](#) | [Claims](#) | [RQMC](#) | [Drawn D](#)

12. Document ID: US 20020106361 A1

L7: Entry 12 of 57

File: PGPB

Aug 8, 2002

PGPUB-DOCUMENT-NUMBER: 20020106361

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20020106361 A1

TITLE: Composition

PUBLICATION-DATE: August 8, 2002

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Poulsen, Charlotte Horsmans	Brabrand		DK	
Kragh, Karsten Matthias	Viby J,		DK	

US-CL-CURRENT: 424/94.4; 504/117, 523/105

[Full](#) | [Title](#) | [Citation](#) | [Front](#) | [Review](#) | [Classification](#) | [Date](#) | [Reference](#) | [Sequences](#) | [Attachments](#) | [Claims](#) | [RQMC](#) | [Drawn D](#)

13. Document ID: US 20020045057 A1

L7: Entry 13 of 57

File: PGPB

Apr 18, 2002

PGPUB-DOCUMENT-NUMBER: 20020045057

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20020045057 A1

mmate. Stannous salt matrixes and methods of making and using the same

US-CL-CURRENT: 428/540; 427/2.1, 428/541, 428/543, 435/243, 435/41, 523/122,
523/124, 523/177, 523/442, 523/458

[Full](#) | [Title](#) | [Citation](#) | [Front](#) | [Review](#) | [Classification](#) | [Date](#) | [Reference](#) | [Sequences](#) | [Attachments](#) | [Claims](#) | [RQMC](#) | [Drawn](#) | [De](#)

14. Document ID: US 20020028288 A1

L7: Entry 14 of 57

File: PGPB

Mar 7, 2002

PGPUB-DOCUMENT-NUMBER: 20020028288

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20020028288 A1

TITLE: Long lasting coatings for modifying hard surfaces and processes for applying the same

PUBLICATION-DATE: March 7, 2002

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Rohrbaugh, Robert Henry	Hamilton	OH	US	
Goldstein, Alan Scott	Blue Ash	OH	US	
McDonald, Michael Ray	Middletown	OH	US	
O'Connor, Helen Frances	Loveland	OH	US	
Liddle, Heather Anne	Cincinnati	OH	US	
Jensen, John Michael	Wyoming	OH	US	
Sakkab, Nabil Yaqub	Cincinnati	OH	US	

US-CL-CURRENT: 427/180; 427/372.2, 427/402

[Full](#) | [Title](#) | [Citation](#) | [Front](#) | [Review](#) | [Classification](#) | [Date](#) | [Reference](#) | [Sequences](#) | [Attachments](#) | [Claims](#) | [RQMC](#) | [Drawn](#) | [De](#)

15. Document ID: US 20020016980 A1

L7: Entry 15 of 57

File: PGPB

Feb 7, 2002

PGPUB-DOCUMENT-NUMBER: 20020016980

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20020016980 A1

TITLE: Transgenic plants incorporating traits of zostera marina

PUBLICATION-DATE: February 7, 2002

US-CL-CURRENT: 800/289; 536/23.6, 800/278

[Full](#) | [Title](#) | [Citation](#) | [Front](#) | [Review](#) | [Classification](#) | [Date](#) | [Reference](#) | [Sequences](#) | [Attachments](#) | [Claims](#) | [KOMC](#) | [Drawn De](#)

16. Document ID: US 20010051274 A1

L7: Entry 16 of 57

File: PGPB

Dec 13, 2001

PGPUB-DOCUMENT-NUMBER: 20010051274

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20010051274 A1

TITLE: Antifouling compounds and uses thereof

PUBLICATION-DATE: December 13, 2001

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Alberte, Randall S.	Falmouth	ME	US	
Zimmerman, Richard C.	Pacific Grove	CA	US	

US-CL-CURRENT: 428/411.1; 424/411, 523/122

[Full](#) | [Title](#) | [Citation](#) | [Front](#) | [Review](#) | [Classification](#) | [Date](#) | [Reference](#) | [Sequences](#) | [Attachments](#) | [Claims](#) | [KOMC](#) | [Drawn De](#)

17. Document ID: US 20010026802 A1

L7: Entry 17 of 57

File: PGPB

Oct 4, 2001

PGPUB-DOCUMENT-NUMBER: 20010026802

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20010026802 A1

TITLE: Method of controlled release and controlled release microstructures

PUBLICATION-DATE: October 4, 2001

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Price, Ronald R.	Stevensville	MD	US	
Schnur, Joel M.	Burke	VA	US	
Schoen, Paul E.	Alexandria	VA	US	
Testoff, Mary	Greenbelt	MD	US	
Georger, Jacque H. JR.	Springfield	VA	US	

18. Document ID: US 6667330 B2

L7: Entry 18 of 57

File: USPT

Dec 23, 2003

US-PAT-NO: 6667330

DOCUMENT-IDENTIFIER: US 6667330 B2

TITLE: Furanone derivatives

DATE-ISSUED: December 23, 2003

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Wang; Bing	Cupertino	CA		
Zhang; Wei	Santa Clara	CA		
Song; Jiangao	Cupertino	CA		
del Balzo; Ughetta	Morgan Hill	CA		
Brown; Lesley	East Palo Alto	CA		
Walkinshaw; Gail	San Jose	CA		

US-CL-CURRENT: 514/367; 514/256, 514/383, 514/473, 544/296, 548/156, 548/262.4,
549/313

ABSTRACT:

Furanone derivatives and the pharmaceutically acceptable salts thereof have cytoprotective activity and protective activity for neuroinflammation, and neurodegenerative disorders; they are useful in the treatment of stroke, cerebral ischemia, myocardial infarction, myocardial ischemia, chronic heart failure, inflammation and other oxidative stress-related conditions, as well as Alzheimer's disease and senile dementia; they are also useful in the manufacture of pharmaceutical formulations for the treatment of such conditions.

47 Claims, 0 Drawing figures

Exemplary Claim Number: 1

[Full](#) | [Title](#) | [Citation](#) | [Front](#) | [Review](#) | [Classification](#) | [Date](#) | [Reference](#) | [Claims](#) | [EPOOC](#) | [Draw. fig.](#)

19. Document ID: US 6608129 B1

L7: Entry 19 of 57

File: USPT

Aug 19, 2003

US-PAT-NO: 6608129

DOCUMENT-IDENTIFIER: US 6608129 B1

NAME	CITY	STATE	ZIP CODE	COUNTRY
Koloski; Timothy S.	West Amherst	NY		
Vargo; Terrence G.	Kenmore	NY		

US-CL-CURRENT: 524/403; 524/430, 524/431, 524/433, 524/439, 524/502, 524/515,
524/520, 524/544, 524/546

ABSTRACT:

Composites which include a polymer matrix having natural free volume therein and an inorganic or organic material disposed in the natural free volume of the polymer matrix are disclosed. In addition, methods for making a composite are described. A polymer matrix having free volume therein is provided. The free volume is evacuated, and inorganic or organic molecules are infused into the evacuated free volume of the polymer matrix. The inorganic or organic molecules can then be polymerized under conditions effective to cause the polymerized inorganic or organic molecules to assemble into macromolecular networks. Alternatively, where the polymer matrix contains a functionality, the inorganic or organic molecules can be treated under conditions effective to cause the inorganic or organic molecules to interact with the polymer matrix's functionality. Use of the disclosed composites as photoradiation shields and filters, electromagnetic radiation shields and filters, antistatic layers, heterogeneous catalysts, conducting electrodes, materials having flame and heat retardant properties, components in the construction of electrolytic cells, fuel cells, and optoelectronic devices, and antifouling coatings is also described.

25 Claims, 4 Drawing figures

Exemplary Claim Number: 1

Number of Drawing Sheets: 3

[Full](#) | [Title](#) | [Citation](#) | [Front](#) | [Review](#) | [Classification](#) | [Date](#) | [Reference](#) | [Search](#) | [Help](#) | [Claims](#) | [KOMC](#) | [Draw](#) | [De](#)

20. Document ID: US 6555228 B2

L7: Entry 20 of 57

File: USPT

Apr 29, 2003

US-PAT-NO: 6555228

DOCUMENT-IDENTIFIER: US 6555228 B2

TITLE: Bio-supportive medium, and methods of making and using the same

DATE-ISSUED: April 29, 2003

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Guritza; Dennis A.	Chagrin Falls	OH	44023	

USPTO SUPPORTS 100% GREEN OFFICE INITIATIVES. 100% RECYCLED PAPER. 100% GREEN POWER. 100% GREEN COMPUTERS. 100% GREEN OFFICE EQUIPMENT.

at least one nutritional source, and at least one bio-limiting agent dispersed in the biodegradable material. The nutritional source is present in the degradable material or an additive to the degradable material. The components of the bio-supportive medium are provided in quantities, such that the bio-supportive medium is capable of supporting formation of a biomass having a specific consortium of organisms, substantially at equilibrium within its environment or host habitat. While maintaining the biomass, the bio-limiting agent also provides the bio-supportive medium to limit the amount and type of species present in the biomass. The instant invention provides a unique bio-mimicking and environmentally-friendly way to control fouling of materials exposed to marine and aquatic environments.

38 Claims, 0 Drawing figures
Exemplary Claim Number: 31,32

[Full](#) [Title](#) [Citation](#) [Front](#) [Review](#) [Classification](#) [Date](#) [Reference](#) [Search](#) [Print](#) [Fwd Refs](#) [Bkwd Refs](#) [Claims](#) [RQMC](#) [Drawn Ds](#)

[Clear](#) [Generate Collection](#) [Print](#) [Fwd Refs](#) [Bkwd Refs](#) [Generate OACS](#)

Terms	Documents
L1 and marine	57

Display Format:

[Previous Page](#) [Next Page](#) [Go to Doc#](#)

Search Results - Record(s) 21 through 40 of 57 returned.

21. Document ID: US 6440405 B1

Using default format because multiple data bases are involved.

L7: Entry 21 of 57

File: USPT

Aug 27, 2002

US-PAT-NO: 6440405

DOCUMENT-IDENTIFIER: US 6440405 B1

**** See image for Certificate of Correction ****

TITLE: Quaternary ammonium functionalized dendrimers and methods of use therefor

DATE-ISSUED: August 27, 2002

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Cooper; Stuart L.	Chicago	IL		
Chen; Chris Zhisheng	Media	PA		

US-CL-CURRENT: 424/78.17; 424/486, 424/719, 424/DIG.16, 564/281

22. Document ID: US 6410622 B1

L7: Entry 22 of 57

File: USPT

Jun 25, 2002

US-PAT-NO: 6410622

DOCUMENT-IDENTIFIER: US 6410622 B1

TITLE: Method of preventing fouling organisms in marine environments and polymer-bound nitric oxide/nitric oxide-releasing compositions usable therefor

DATE-ISSUED: June 25, 2002

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Endres; Gregory W.	Saline	MI	48176	

US-CL-CURRENT: 524/189; 523/122, 525/360, 525/376, 525/420, 525/437, 525/453,

of introducing into the marine environment in a predetermined form and in a sufficient amount an antifouling composition having as its effective ingredient a nitric oxide-releasing functional group of the diazeniumdiolate structure: ##STR1##

whereupon nitric oxide is controllably released into the marine environment to prevent at least one of the fouling organisms' propagation, ability to attach, and ability to function.

An antifouling composition consists essentially of an antifouling-acceptable carrier and a coprecipitation product of polylactide/glycolide and diethylenetriamine having the formula $H_{sub.3}N_{sup.+}CH_{sub.2}CH_{sub.2}N(N_{sub.2}O_{sub.2})_{sup.-1}CH_{sub.2}CH_{sub.2}NH_{sub.2}$, wherein diethylenetriamine contains a nitric oxide-releasing functional group.

20 Claims, 0 Drawing figures
Exemplary Claim Number: 1

[Full](#) | [Title](#) | [Citation](#) | [Front](#) | [Review](#) | [Classification](#) | [Date](#) | [Reference](#) | [Search](#) | [Help](#) | [Claims](#) | [POMC](#) | [Drawn D](#)

23. Document ID: US 6361780 B1

L7: Entry 23 of 57

File: USPT

Mar 26, 2002

US-PAT-NO: 6361780

DOCUMENT-IDENTIFIER: US 6361780 B1

TITLE: Microporous drug delivery system

DATE-ISSUED: March 26, 2002

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Ley; Gregory R.	New Brighton	MN		
Knapp; Christopher Paul	Oakdale	MN		

US-CL-CURRENT: 424/400; 424/422, 424/423, 424/432, 424/443, 424/484, 424/486, 604/264, 604/265

ABSTRACT:

A drug delivery device is described comprising a porous biocompatible solid having at least one therapeutic drug within its pores, the therapeutic drug being removable from the pores by immersion in an aqueous solution. This may also be described as a drug delivery device comprising a porous annulus comprising a biocompatible solid having at least one therapeutic drug within its pores, the therapeutic drug being removable from the pores by immersion in an aqueous solution, the annulus having a top outer surface with an outside diameter, an inner surface with an inside diameter and a side surface at least one side surface.

The device may have a medical device or component of a medical device pass through an opening in the annulus. Examples of such medical devices may include, but not be limited to medical devices or components of medical devices selected from the group consisting of catheters, tubes, and electrical leads. A catheter or electrical lead may have at least a portion of its length surrounded by the porous drug delivery device.

A more specific description of an aspect of the present invention would include a catheter or cardiac lead having a collar comprising a porous, solid material surrounding at least a length of the catheter or cardiac lead, the collar comprising a porous material selected from the group consisting of inorganic oxides, metals, polymers, and composite materials, the porous material having pores with an average greatest dimension of between about 10.^{sup.-6} and 10.^{sup.-1} mm, and the collar having a largest dimension of less than 5 mm.

16 Claims, 4 Drawing figures

Exemplary Claim Number: 1

Number of Drawing Sheets: 4

[Full](#) | [Title](#) | [Citation](#) | [Front](#) | [Review](#) | [Classification](#) | [Date](#) | [Reference](#) | [Abstract](#) | [Claims](#) | [KWMC](#) | [Drawings](#)

24. Document ID: US 6328700 B1

L7: Entry 24 of 57

File: USPT

Dec 11, 2001

US-PAT-NO: 6328700

DOCUMENT-IDENTIFIER: US 6328700 B1

TITLE: Locating marker/tracer elements detectable by neutron activated analysis within or on carrier microspheres, including microspheres used in biological experimentation

DATE-ISSUED: December 11, 2001

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Rheinhardt; Christopher	Worcester	MA	01601	
Kemper; W. Scott	San Diego	CA	92129	

US-CL-CURRENT: 600/504; 600/3, 600/505

ABSTRACT:

Microspheres are permanently marked with non-radioactive stable isotopes of elements suitably detected by neutron activation analysis. The marked microspheres are suitable to permanently label diverse things. For example, families of stable-multiple-isotope-marked microspheres injected into an animal become lodged by the circulating blood within selected tissues of an animal during blood flow analysis.

microspheres to the tissue. Microspheres are preferably marked with stable isotopes of gold, antimony, lanthanum, samarium, europium, terbium, holmium, ytterbium, lutetium, hafnium, tantalum, tungsten, rhenium, osmium, iridium, scandium and/or bromide.

22 Claims, 3 Drawing figures

Exemplary Claim Number: 1

Number of Drawing Sheets: 3

[Full](#) | [Title](#) | [Citation](#) | [Front](#) | [Review](#) | [Classification](#) | [Date](#) | [Reference](#) | [Search](#) | [Print](#) | [Claims](#) | [EPODOC](#) | [Drawn](#) | [Def](#)

25. Document ID: US 6285807 B1

L7: Entry 25 of 57

File: USPT

Sep 4, 2001

US-PAT-NO: 6285807

DOCUMENT-IDENTIFIER: US 6285807 B1

TITLE: Fiber optic sensor for long-term analyte measurements in fluids

DATE-ISSUED: September 4, 2001

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Walt; David R.	Lexington	MA		
Tabacco; Mary Beth	Boston	MA		
Uttamlal; Mahesh	Glasgow			GB

US-CL-CURRENT: 385/12; 250/227.14, 250/227.18, 436/171, 436/172

ABSTRACT:

A robust fiber optic sensor and sensing method for reliable, long-term measurement of analytes is disclosed. The sensor comprises an optical interrogation region comprising an indicator dye confined at a distal end of an optical fiber and an analyte permeable membrane enclosing the interrogation region at the distal fiber end. In a preferred embodiment, a reservoir member is provided with excess dye for continuous replenishment of the interrogation region with dye over the lifetime of the sensor. In another preferred embodiment, the reservoir member comprises an indicator support for containment of excess dye. In one preferred embodiment, a ratiometric dye is used for monitoring optical signal-to-noise and signal drift caused by sensor aging. The sensor may be configured with a variety of alternative indicator dyes and membrane materials as a specific ion sensor for analyzing dissolved analytes such as gases, cations, and anions. The sensor may be configured for a wide dynamic detection range and sensitivity for specific analytes. In one embodiment, a CO₂ is disclosed which has a reversible working dynamic detection range between 200 and 1000 ppm pCO₂ and a sensitivity ± 1 ppm. An integrated measurement system and measurement methods for remote sensing

14 Claims, 16 Drawing figures
Exemplary Claim Number: 1
Number of Drawing Sheets: 14

[Full](#) | [Title](#) | [Citation](#) | [Front](#) | [Review](#) | [Classification](#) | [Date](#) | [Reference](#) | [Claims](#) | [RQMC](#) | [Drawn](#)

26. Document ID: US 6280759 B1

L7: Entry 26 of 57

File: USPT

Aug 28, 2001

US-PAT-NO: 6280759

DOCUMENT-IDENTIFIER: US 6280759 B1

TITLE: Method of controlled release and controlled release microstructures

DATE-ISSUED: August 28, 2001

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Price; Ronald R.	Stevensville	MD	21666	
Schnur; Joel M.	Burke	VA	22015	
Schoen; Paul E.	Alexandria	VA	22304	
Testoff; Mary	Greenbelt	MD	20770	
Georger, Jr.; Jacque H.	Springfield	VA	22153	
Rudolph; Alan	Bowie	MD	20716	
Brady; Robert F.	Gaithersburg	MD	20878	

US-CL-CURRENT: 424/408; 424/405, 424/406, 424/411, 424/417, 424/418, 424/419,
424/420, 424/499, 523/122

ABSTRACT:

Tubules which contain an active agent in their lumen and compositions containing such microtubules are effective for providing a slow, controlled release of the active agent. Such microtubules are useful in the production of coating compositions for the protection of surfaces coming into contact with water, adhesive resins for the production of laminated wood products, and devices for dispensing pesticides.

14 Claims, 5 Drawing figures
Exemplary Claim Number: 1
Number of Drawing Sheets: 5

[Full](#) | [Title](#) | [Citation](#) | [Front](#) | [Review](#) | [Classification](#) | [Date](#) | [Reference](#) | [Claims](#) | [RQMC](#) | [Drawn](#)

DOCUMENT-IDENTIFIER: US 6270903 B1

TITLE: Method of bonding functional surface materials to substrates and applications in microtechnology and anti-fouling

DATE-ISSUED: August 7, 2001

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Feng; Xiangdong	West Richland	WA		
Liu; Jun	West Richland	WA		
Liang; Liang	Richland	WA		

US-CL-CURRENT: 428/429; 428/442

ABSTRACT:

A simple and effective method to bond a thin coating of poly(N-isopropylacrylamide) (NIPAAm) on a glass surface by UV photopolymerization, and the use of such a coated surface in nano and micro technology applications. A silane coupling agent with a dithiocarbamate group is provided as a photosensitizer preferably, (N,N'-diethylamine) dithiocarbamoylpropyl-(trimethoxy) silane (DATMS). The thiocarbamate group of the sensitizer is then bonded to the glass surface by coupling the silane agent with the hydroxyl groups on the glass surface. The modified surface is then exposed to a solution of NIPAAm and a crosslinking agent which may be any organic molecule having an acrylamide group and at least two double bonds in its structure, such as N, N'-methylenebisacrylamide, and a polar solvent which may be any polar liquid which will dissolve the monomer and the crosslinking agent such as acetone, water, ethanol, or combinations thereof. By exposing the glass surface to a UV light, free radicals are generated in the thiocarbamate group which then bonds to the crosslinking agent and the NIPAAm. Upon bonding, the crosslinking agent and the NIPAAm polymerize to form a thin coating of PNIPAAm bonded to the glass. Depending upon the particular configuration of the glass, the properties of the PNIPAAm allow applications in micro and nano technology.

15 Claims, 20 Drawing figures

Exemplary Claim Number: 1

Number of Drawing Sheets: 14

[Full](#) | [Title](#) | [Citation](#) | [Front](#) | [Review](#) | [Classification](#) | [Date](#) | [Reference](#) | [Claims](#) | [KOMC](#) | [Drawn D.](#)

28. Document ID: US 6174700 B1

L7: Entry 28 of 57

File: USPT

Jan 16, 2001

US-PAT-NO: 6174700

DOCUMENT-IDENTIFIER: US 6174700 B1

NAME	CITY	STATE	ZIP CODE	COUNTRY
Haynes; Charles A.	Vancouver			CA
Tomme; Peter	Vancouver			CA
Kilburn; Douglas G.	Vancouver			CA

US-CL-CURRENT: 435/68.1; 435/178, 435/179, 435/320.1, 435/69.1, 435/69.7, 435/70.1,
435/71.1, 435/71.2, 435/803, 435/815, 436/529, 436/530, 530/413, 530/813, 530/814

ABSTRACT:

A compound having a polysaccharide binding domain such as contained by a cellulose and essentially lacking in polysaccharidase activity is purified from other ingredients in a mixture using an affinity partition system. A mixture containing the compound is contacted with a system containing as a first phase an aqueous solution of oligosaccharide polymer such as cellulose and as a second phase a solution of a polymer such as a poly(ethylene glycol)-poly(propylene glycol) copolymer. The compound partitions into the first phase and binds to the oligosaccharide polymer, preferably with a $K_{sub}a$ of $10^{sup}3$ to $10^{sup}7$, to form a complex. The complex is collected, and the compound is dissociated from the oligosaccharide polymer. The compound may be formed of a non-peptide chemical moiety or a peptide moiety linked to a polypeptide having the polysaccharide binding domain. The compound may also be a fusion polypeptide containing the polysaccharide binding domain linked through a protease recognition sequence to a macromolecule such as an enzyme, a hormone or an antibody. The macromolecule can be removed by using a protease to cleave the recognition sequence. Another partition system contains the oligosaccharide polymer and a phase separation inducing agent such as a sulfate or citrate salt that induces separation to produce different phases.

34 Claims, 25 Drawing figures

Exemplary Claim Number: 1

Number of Drawing Sheets: 18

Full Title Citation Front Review Classification Date Reference Claims None Drawings

□ 29. Document ID: US 6124117 A

L7: Entry 29 of 57

File: USPT

Sep 26, 2000

US-PAT-NO: 6124117

DOCUMENT-IDENTIFIER: US 6124117 A

TITLE: Polysaccharide binding fusion proteins and conjugates

DATE-ISSUED: September 26, 2000

INVENTOR - INFORMATION:

NAME _____ CITY _____ STATE _____ ZIP CODE _____ COUNTRY _____

US-CL-CURRENT: 435/69.1; 435/200, 435/252.3, 435/69.7, 536/23.2, 536/23.4

ABSTRACT:

Novel polypeptide compositions and methods for their use are provided comprising fusion proteins in which the polysaccharide binding domain or functional portion thereof of a polysaccharidase is fused to a heterologous protein or is conjugated to a chemical moiety. The compositions can be synthesized or prepared by recombinant DNA technology. The compositions find use as removable labels.

25 Claims, 35 Drawing figures

Exemplary Claim Number: 1

Number of Drawing Sheets: 20

[Full](#) | [Title](#) | [Citation](#) | [Front](#) | [Review](#) | [Classification](#) | [Date](#) | [Reference](#) | [Search](#) | [Claims](#) | [RQMD](#) | [Drawn](#) | [Def](#)

30. Document ID: US 6093732 A

L7: Entry 30 of 57

File: USPT

Jul 25, 2000

US-PAT-NO: 6093732

DOCUMENT-IDENTIFIER: US 6093732 A

TITLE: 4-hydroxyquinoline-3-carboxamides and hydrazides as antiviral agents

DATE-ISSUED: July 25, 2000

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Tucker; John Alan	Kalamazoo	MI		
Vaillancourt; Valerie A.	Kalamazoo	MI		
Strohbach; Joseph Walter	Mendon	MI		
Romines; Karen Rene	Paw Paw	MI		
Schnute; Mark E.	Kalamazoo	MI		
Cudahy; Michele M.	Kalamazoo	MI		
Thaisrivongs; Suvit	Kalamazoo	MI		
Turner; Steven Ronald	Kalamazoo	MI		

US-CL-CURRENT: 514/312; 546/156

ABSTRACT:

The present invention provides 4-hydroxyquinoline-3-carboxamide and hydrazide compounds of formula I ##STR1## These compounds are useful to treat or prevent the herpesviral infections, particularly, human cytomegaloviral infection.

31. Document ID: US 6048715 A

L7: Entry 31 of 57

File: USPT

Apr 11, 2000

US-PAT-NO: 6048715

DOCUMENT-IDENTIFIER: US 6048715 A

TITLE: Two-phase partition affinity separation system and affinity separated cell-containing composition

DATE-ISSUED: April 11, 2000

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Haynes; Charles A.	British Columbia			CA
Tomme; Peter	British Columbia			CA
Kilburn; Douglas G.	British Columbia			CA

US-CL-CURRENT: 435/179; 435/178, 435/320.1, 435/395, 435/68.1, 435/69.1, 435/69.7,
435/70.1, 435/71.1, 435/71.2, 435/803, 435/815, 436/529, 436/530, 530/413,
530/813, 530/814

ABSTRACT:

A two-phase partition system is provided for affinity separation of a composition containing a polysaccharide binding peptide from a mixture such as a fermentation broth. The peptide may be from an enzyme and lacking in polysaccharidase activity such as the binding domain of cellulase that binds to cellulose. The system contains a phase-forming oligosaccharide polymer such as a cellulose derivative to which the peptide binds with a K_a of 10.3 M to 10.7 M, and a phase inducing agent such as a polyethylene glycol polymer, or a salt present at sufficiently high concentration to induce phase separation. If the oligosaccharide polymer is thermoseparating, phase separation can be induced by heating. Using the system involves contacting a composition containing the peptide such as a fusion protein with the system, partitioning the composition into a phase containing the oligosaccharide polymer by binding to the polymer and recovering the polymer containing the bound composition. The peptide or a fusion protein containing the peptide can be contacted with a cell having a carbohydrate residue to which the peptide binds to form a complex, and the complex is separated with the system to produce a bound cell composition. The peptide may be linked through a protease recognition sequence to a macromolecule such as an enzyme, a hormone or an antibody, and the macromolecule can be removed by using a protease to cleave the recognition sequence.

22 Claims, 26 Drawing figures

Exemplary Claim Number: 1

Number of Drawing Sheets: 18

L7: Entry 32 of 57

File: USPT

Dec 7, 1999

US-PAT-NO: 5998200

DOCUMENT-IDENTIFIER: US 5998200 A

TITLE: Anti-fouling methods using enzyme coatings

DATE-ISSUED: December 7, 1999

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Bonaventura; Celia	Beaufort	NC		
Bonaventura; Joseph	Beaufort	NC		
Hooper; Irving R.	Beaufort	NC		

US-CL-CURRENT: 435/264; 106/15.05, 422/6, 424/94.1, 424/94.63, 435/174, 435/180

ABSTRACT:

A method for preventing fouling of an aquatic apparatus by an aquatic organism which comprises affixing a biologically active chemical to a surface intended for use in contact with an aquatic environment containing the organism, wherein the chemical is an enzyme, repellent, chelating agent, enzyme inhibitor, or non-metallic toxicant capable of hindering the attachment of the organism to the surface while affixed to the surface, is disclosed along with improved apparatuses which are produced using the method.

14 Claims, 1 Drawing figures

Exemplary Claim Number: 1

Number of Drawing Sheets: 1

[Full](#) | [Title](#) | [Citation](#) | [Front](#) | [Review](#) | [Classification](#) | [Date](#) | [Reference](#) | [Abstract](#) | [Claims](#) | [Food](#) | [Draw. D.](#)

33. Document ID: US 5997961 A

L7: Entry 33 of 57

File: USPT

Dec 7, 1999

US-PAT-NO: 5997961

DOCUMENT-IDENTIFIER: US 5997961 A

TITLE: Method of bonding functional surface materials to substrates and applications in microtechnology and antifouling

DATE-ISSUED: December 7, 1999

INVENTOR-INFORMATION:

US-CL-CURRENT: 427/515; 427/407.2, 427/518

ABSTRACT:

A simple and effective method to bond a thin coating of poly(N-isopropylacrylamide) (NIPAAm) on a glass surface by UV photopolymerization, and the use of such a coated surface in nano and micro technology applications. A silane coupling agent with a dithiocarbamate group is provided as a photosensitizer, preferably, (N,N'-diethylamine)dithiocarbamoylpropyl-(trimethoxy)silane (DATMS). The thiocarbamate group of the sensitizer is then bonded to the glass surface by coupling the silane agent with the hydroxyl groups on the glass surface. The modified surface is then exposed to a solution of NIPAAm and a crosslinking agent which may be any organic molecule having an acrylamide group and at least two double bonds in its structure, such as N,N'-methylenebisacrylamide, and a polar solvent which may be any polar liquid which will dissolve the monomer and the crosslinking agent such as acetone, water, ethanol, or combinations thereof. By exposing the glass surface to a UV light, free radicals are generated in the thiocarbamate group which then bonds to the crosslinking agent and the NIPAAm. Upon bonding, the crosslinking agent and the NIPAAm polymerize to form a thin coating of PNIPAAm bonded to the glass. Depending upon the particular configuration of the glass, the properties of the PNIPAAm allow applications in micro and nano technology.

6 Claims, 20 Drawing figures

Exemplary Claim Number: 1

Number of Drawing Sheets: 14

[Full](#) | [Title](#) | [Citation](#) | [Front](#) | [Review](#) | [Classification](#) | [Date](#) | [Reference](#) | [Search](#) | [Print](#) | [Claims](#) | [DOCID](#) | [Draw. D.](#)

34. Document ID: US 5972363 A

L7: Entry 34 of 57

File: USPT

Oct 26, 1999

US-PAT-NO: 5972363

DOCUMENT-IDENTIFIER: US 5972363 A

TITLE: Use of an encapsulated bioactive composition

DATE-ISSUED: October 26, 1999

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Clikeman; Richard Roy	Morrisville	PA		
Natoli; John	Ambler	PA		
Wills; Morris Christopher	Philadelphia	PA		
Guo; Yili	Maple Glen	PA		

US-CL-CURRENT: 424/408; 264/4.1, 424/405, 424/406, 424/419, 427/213.36, 428/402.21

or the bioactive compound through the physical-chemical properties of a particle containing the bioactive compound. The method is particularly useful for delivering agricultural chemicals and pharmaceutical compounds.

8 Claims, 0 Drawing figures

Exemplary Claim Number: 1

[Full](#) | [Title](#) | [Citation](#) | [Front](#) | [Review](#) | [Classification](#) | [Date](#) | [Reference](#) | [Text](#) | [Chemical](#) | [Claims](#) | [KIND](#) | [Drawn](#) | [De](#)

35. Document ID: US 5962289 A

L7: Entry 35 of 57

File: USPT

Oct 5, 1999

US-PAT-NO: 5962289

DOCUMENT-IDENTIFIER: US 5962289 A

TITLE: Polysaccharide binding fusion proteins and conjugates

DATE-ISSUED: October 5, 1999

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Kilburn; Douglas G.	Vancouver			CA
Miller; Robert C.	North Vancouver			CA
Warren; Richard A.J.	Vancouver			CA
Gilkes; Neil R.	Vancouver			CA

US-CL-CURRENT: 435/179; 435/177, 435/178, 435/195, 435/200, 435/209, 435/4,
435/69.1, 435/69.52, 435/69.7, 435/71.1, 435/803, 436/530, 530/402, 530/413,
530/808, 530/814

ABSTRACT:

Fusion proteins or conjugates are provided containing an amino acid sequence having a substrate binding region of a polysaccharidase such as cellulase that binds to a .beta.-1,4-glycan matrix such as cellulose. The substrate binding region is essentially without polysaccharidase activity. In the fusion protein, the substrate binding region is fused or chemically linked to a polypeptide such as an enzyme, a hormone, an immunoglobulin or a protein dye. By contacting the fusion protein with a .beta.-1,4-glycan matrix, the substrate binding region binds to the matrix to immobilize the polypeptide on the matrix. The polypeptide or fusion protein can be removed from the matrix with a protease acting on a protease recognition sequence or with a solution having a low ionic strength or high pH. In the conjugate, the substrate binding region is joined such as by covalent bonding to a non-protein chemical moiety such as a dye, chromophore, fluorescor, radionuclide or enzyme co-factor. By contacting the conjugate with a .beta.-1,4-glycan matrix, the substrate binding region binds to the matrix to immobilize the chemical moiety on the matrix. The conjugate or chemical moiety can be removed with a protease acting on a

36. Document ID: US 5928917 A

L7: Entry 36 of 57

File: USPT

Jul 27, 1999

US-PAT-NO: 5928917

DOCUMENT-IDENTIFIER: US 5928917 A

TITLE: Conjugate of non-protein chemical moiety and polypeptide having cellulose binding region

DATE-ISSUED: July 27, 1999

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Kilburn; Douglas G.	Vancouver			CA
Miller; Robert C.	North Vancouver			CA
Gilkes; Neil	Vancouver			CA
Warren; R. Antony J.	Vancouver			CA

US-CL-CURRENT: 435/179; 435/177, 435/195, 435/200, 435/209, 435/4, 435/69.1,
435/69.52, 435/69.7, 435/71.1, 435/803, 436/530, 530/402, 530/808, 530/814

ABSTRACT:

Fusion proteins or conjugates are provided containing an amino acid sequence having a substrate binding region of a polysaccharidase such as cellulase that binds to a .beta.-1,4-glycan matrix such as cellulose. The substrate binding region is essentially without polysaccharidase activity. In the fusion protein, the substrate binding region is fused or chemically linked to a polypeptide such as an enzyme, a hormone, an immunoglobulin or a protein dye. By contacting the fusion protein with a .beta.-1,4-glycan matrix, the substrate binding region binds to the matrix to immobilize the polypeptide on the matrix. The polypeptide or fusion protein can be removed from the matrix with a protease recognition sequence or with a solution having a low ionic strength or high pH. In the conjugate, the substrate binding region is joined such as by covalent bonding to a non-protein chemical moiety such as a dye, chromophore, fluorescor, radionuclide or enzyme co-factor. By contacting the conjugate with a .beta.-1,4-glycan matrix, the substrate binding region binds to the matrix to immobilize the chemical moiety on the matrix. The conjugate or chemical moiety can be removed with a protease acting on a protease recognition sequence or with a solution having a low ionic strength or high pH.

43 Claims, 35 Drawing figures

Exemplary Claim Number: 1,43

Number of Drawing Sheets: 20

L7: Entry 37 of 57

File: USPT

Feb 20, 1996

US-PAT-NO: 5492696

DOCUMENT-IDENTIFIER: US 5492696 A

TITLE: Controlled release microstructures

DATE-ISSUED: February 20, 1996

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Price; Ronald R.	Stevensville	MD		
Schnur; Joel M.	Burke	VA		
Schoen; Paul E.	Alexandria	VA		
Testoff; Mary	Greenbelt	MD		
Georger, Jr.; Jacque H.	Springfield	VA		
Rudolph; Alan	Bowie	MD		
Brady; Robert F.	Gaithersburg	MD		

US-CL-CURRENT: 424/417; 264/4.4, 264/4.7, 424/405, 424/406, 424/419

ABSTRACT:

Tubules which contain an active agent in their lumen and compositions containing such microtubules are effective for providing a slow, controlled release of the active agent. Such microtubules are useful in the production of coating compositions for the protection of surfaces coming into contact with water, adhesive resins for the production of laminated wood products, and devices for dispensing pesticides.

3 Claims, 5 Drawing figures

Exemplary Claim Number: 1

Number of Drawing Sheets: 5

[Full](#) | [Title](#) | [Citation](#) | [Front](#) | [Review](#) | [Classification](#) | [Date](#) | [Reference](#) | [Claims](#) | [RQMC](#) | [Draw. De](#)

38. Document ID: US 5340731 A

L7: Entry 38 of 57

File: USPT

Aug 23, 1994

US-PAT-NO: 5340731

DOCUMENT-IDENTIFIER: US 5340731 A

** See image for Certificate of Correction **

TITLE: Method of preparing a B-1,4 glycan matrix containing a bound fusion protein

Kilburn, Douglas G.

Miller; Robert C.

Gilkes; Neil

Warren; R. Antony J.

North Vancouver

CA

Vancouver

CA

Vancouver

CA

US-CL-CURRENT: 435/179; 435/177, 435/195, 435/200, 435/209, 435/69.1, 435/69.52,
435/69.7, 435/71.1, 435/803, 436/530, 530/808, 530/814

ABSTRACT:

A fusion protein that can function as a removable label is prepared containing a polypeptide such as an enzyme and an amino acid sequence having a substrate binding region of a polysaccharidase such as cellulase that has essentially no polysaccharidase activity. By contacting the fusion protein with a β -1,4 glycan matrix such as cellulose, the substrate binding region binds to the matrix to immobilize the polypeptide. The polypeptide or fusion protein can be removed from the matrix with a protease capable of cleaving a specific protease cleavage site, or with a solution having a low ionic strength or a high pH. The fusion protein can be prepared by recombinant DNA technology.

19 Claims, 35 Drawing figures

Exemplary Claim Number: 1

Number of Drawing Sheets: 20

[Full](#) | [Title](#) | [Citation](#) | [Front](#) | [Review](#) | [Classification](#) | [Date](#) | [Reference](#) | [Search](#) | [Help](#) | [Claims](#) | [KOMC](#) | [Drawn](#) | [De](#)

39. Document ID: US 5202247 A

L7: Entry 39 of 57

File: USPT

Apr 13, 1993

US-PAT-NO: 5202247

DOCUMENT-IDENTIFIER: US 5202247 A

**** See image for Certificate of Correction ****

TITLE: Cellulose binding fusion proteins having a substrate binding region of cellulase

DATE-ISSUED: April 13, 1993

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Kilburn; Douglas G.	Vancouver			CA
Miller; Robert C.	Vancouver			CA
Warren; Richard A. J.	Vancouver			CA
Gilkes; Neil R.	Vancouver			CA

US-CL-CURRENT: 435/195; 435/177, 435/179, 435/200, 435/209, 435/69.1, 435/69.52,

cellulase that has essentially no polysaccharidase activity. By contacting the fusion protein with an affinity matrix containing a substrate such as cellulose for the cellulase substrate binding region, the substrate binding region binds to the affinity matrix to immobilize the polypeptide. The polypeptide can be purified by separating the fusion protein or polypeptide from the affinity matrix. The polypeptide can be separated by cleaving the protein with a *Cellulomonas fimi* protease.

8 Claims, 9 Drawing figures

Exemplary Claim Number: 1

Number of Drawing Sheets: 8

Full Title Citation Front Review Classification Date Reference

40. Document ID: US 5137819 A

L7: Entry 40 of 57

File: USPT

Aug 11, 1992

US-PAT-NO: 5137819

DOCUMENT-IDENTIFIER: US 5137819 A

** See image for Certificate of Correction **

TITLE: Cellulose binding fusion proteins for immobilization and purification of polypeptides

DATE-ISSUED: August 11, 1992

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Kilburn; Douglas G.	Vancouver			CA
Miller; Robert C.	Vancouver			CA
Warren; Richard A. J.	Vancouver			CA
Gilkes; Neil R.	Vancouver			CA

US-CL-CURRENT: 435/179; 435/177, 435/195, 435/200, 435/209, 435/69.1, 435/69.52,
435/69.7, 435/71.1, 435/803

ABSTRACT:

A fusion protein is prepared containing a polypeptide such as an enzyme and an amino acid sequence having a substrate binding region of a polysaccharidase such as cellulase that has essentially no polysaccharidase activity. By contacting the fusion protein with an affinity matrix containing a substrate such as cellulose for the cellulase substrate binding region, the substrate binding region binds to the affinity matrix to immobilize the polypeptide. The polypeptide can be purified by separating the fusion protein or polypeptide from the affinity matrix.

7 Claims, 9 Drawing figures

Clear **Generate Collection** **Print** **Fwd Refs** **Bkwd Refs** **Generate OACS**

Terms	Documents
L1 and marine	57

Display Format: [-] **Change Format**

[Previous Page](#) [Next Page](#) [Go to Doc#](#)

Clear

Generate Collection

Print

Fwd Refs

Bkwd Refs

Generate OACS

Search Results - Record(s) 41 through 57 of 57 returned.

41. Document ID: US 5015677 A

Using default format because multiple data bases are involved.

L7: Entry 41 of 57

File: USPT

May 14, 1991

US-PAT-NO: 5015677

DOCUMENT-IDENTIFIER: US 5015677 A

TITLE: Adhesives derived from bioadhesive polyphenolic proteins

DATE-ISSUED: May 14, 1991

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Benedict; Christine V.	Farmington	CT		
Picciano; Paul T.	Canton	CT		

US-CL-CURRENT: 524/17; 106/124.1, 106/135.1, 106/151.1, 106/154.11, 106/159.1,
106/160.1, 156/336, 524/21, 524/22, 524/25, 530/328, 530/350

Full | **Title** | **Citation** | **Front** | **Review** | **Classification** | **Date** | **Reference** | **Claims** | **KOMC** | **Drawn Ds**

42. Document ID: US 4663202 A

L7: Entry 42 of 57

File: USPT

May 5, 1987

US-PAT-NO: 4663202

DOCUMENT-IDENTIFIER: US 4663202 A

TITLE: Prevention of undesired adsorption on surfaces

DATE-ISSUED: May 5, 1987

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Causton; Brian E.	North Waltham			GB2

US-CL-CURRENT: 427/388.4; 106/35, 424/49, 427/388.5, 523/118, 524/765, 524/767

reactive groups (A) capable of bonding with the surface to be treated and (b) hydrophobic groups (B); and (2) a polymer comprising (c) at least one hydrophilic polymeric chain (c) and (d) at least one hydrophobic group (D) in the presence of water. Compositions containing the polymer mixture may be used as mouthwashes to prevent or reduce tooth decay and prevent plaque formation. They may also be applied to various surfaces where prevention and/or reduction of colonization by microorganisms on the surfaces is desired.

28 Claims, 6 Drawing figures
Exemplary Claim Number: 1,9,15
Number of Drawing Sheets: 3

[Full](#) | [Title](#) | [Citation](#) | [Front](#) | [Review](#) | [Classification](#) | [Date](#) | [Reference](#) | [Claims](#) | [KOMC](#) | [Drawn D](#)

43. Document ID: US 4603006 A

L7: Entry 43 of 57

File: USPT

Jul 29, 1986

US-PAT-NO: 4603006

DOCUMENT-IDENTIFIER: US 4603006 A

**** See image for Certificate of Correction ****

TITLE: Inhibition of inorganic or biological CaCO_3 deposition by synthetic polysaccharide derivatives

DATE-ISSUED: July 29, 1986

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Sikes; C. Steven	Mobile	AL		
Wheeler; A. P.	Clemson	SC		

US-CL-CURRENT: 252/180; 210/698, 252/175, 427/384

ABSTRACT:

The present invention relates to a method of inhibiting the formation of calcium carbonate-containing deposits on a surface by applying a composition comprising an anticalcification-effective amount of a polysaccharide or derivative thereof. The present method is useful for the prevention and/or retardation (inhibition) of inorganic scaling, as well as, for the inhibition of fouling by plant or animal organisms.

17 Claims, 0 Drawing figures
Exemplary Claim Number: 1

[Full](#) | [Title](#) | [Citation](#) | [Front](#) | [Review](#) | [Classification](#) | [Date](#) | [Reference](#) | [Claims](#) | [KOMC](#) | [Drawn D](#)

US-PAT-NO: 4594965

DOCUMENT-IDENTIFIER: US 4594965 A

TITLE: Symbiotic aqua-culture

DATE-ISSUED: June 17, 1986

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Asher, Jr.; Donald F.	Annapolis	MD	21403	
Munz, deceased; Otto J.	late of Arlington	VA		
Munz, Executrix; by Gerta H.	Arlington	VA		

US-CL-CURRENT: 119/239; 119/200, 119/242

ABSTRACT:

A symbiotic aqua-culture system includes a barrier fence surrounding a protected body of water in which is extended a conduit having a plurality of tubes therein and which is coaxial with a tubular screen. An electrode in the form of a helically wound wire on the conduit coacts with the tubular screen, which comprises a second electrode, to form an electrical field which attracts marine life and stimulates the growth thereof. The barrier fence may also be constructed to produce an electrical field to inhibit or kill undesired marine organisms attempting to pass through the fence. The tubes within the conduit are connected to sources of various materials, such as nutrients, algaecide, heat, etc., and valves are connected with the tubes to control flow therethrough. Orifices connect the tubes with the surface of the conduit along its length to supply the materials as desired. The method of symbiotic mari-culture using the structure is also disclosed.

10 Claims, 7 Drawing figures

Exemplary Claim Number: 1

Number of Drawing Sheets: 2

[Full](#) | [Title](#) | [Citation](#) | [Front](#) | [Review](#) | [Classification](#) | [Date](#) | [Reference](#) | [Image](#) | [Text](#) | [Claims](#) | [Table](#) | [Drawn](#) | [Detailed](#)

45. Document ID: US 4587021 A

L7: Entry 45 of 57

File: USPT

May 6, 1986

US-PAT-NO: 4587021

DOCUMENT-IDENTIFIER: US 4587021 A

** See image for Certificate of Correction **

TITLE: Inhibition of the formation of inorganic or biological CaCO₃ - containing deposits by a proteinaceous fraction obtained from CaCO₃ -forming organisms

Sikes; C. Steven

Mobile AL

US-CL-CURRENT: 210/698; 106/14.05, 134/22.14, 252/180, 422/16

ABSTRACT:

The present invention relates to a method of inhibiting the formation of CaCO₃-containing deposits on a surface by applying a composition comprising an anti-calcification-effective amount of the peptide-containing or the protein-containing fractions isolated from a CaCO₃-containing tissue obtained from a CaCO₃-forming organism. Said fractions can be isolated from many CaCO₃-containing tissues, including, but not limited to, molluscan shells, echinoderm skeletons, carbonate sands, crustacean exoskeletons, coral endoskeletons and the like. The present method is useful for the prevention and/or retardation of inorganic scaling, as well as, for the inhibition of fouling by plant or animal organisms.

21 Claims, 14 Drawing figures

Exemplary Claim Number: 1,15

Number of Drawing Sheets: 7

[Full](#) [Title](#) [Citation](#) [Front](#) [Review](#) [Classification](#) [Date](#) [Reference](#) [Image](#) [Text](#) [Claims](#) [BMMC](#) [Drawn D](#)

46. Document ID: US 4585560 A

L7: Entry 46 of 57

File: USPT

Apr 29, 1986

US-PAT-NO: 4585560

DOCUMENT-IDENTIFIER: US 4585560 A

** See image for Certificate of Correction **

TITLE: Inhibition of inorganic and biological CaCO₃ deposition by a polysaccharide fraction obtained from CaCO₃-forming organisms

DATE-ISSUED: April 29, 1986

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Sikes; C. Steven	Mobile	AL		
Wheeler; A. P.	Clemson	SC		

US-CL-CURRENT: 210/698; 106/14.15, 134/22.14, 252/180, 422/16

ABSTRACT:

The present invention relates to a method of inhibiting the formation of CaCO₃-containing deposits on a surface, by applying a composition comprising an anti-calcification effective amount of the polysaccharide-containing fraction

12 Claims, 0 Drawing figures
Exemplary Claim Number: 1

[Full](#) | [Title](#) | [Citation](#) | [Front](#) | [Review](#) | [Classification](#) | [Date](#) | [Reference](#) | [Claims](#) | [RQMD](#) | [Draw. De](#)

47. Document ID: US 4534881 A

L7: Entry 47 of 57

File: USPT

Aug 13, 1985

US-PAT-NO: 4534881

DOCUMENT-IDENTIFIER: US 4534881 A

** See image for Certificate of Correction **

TITLE: Inhibition of inorganic or biological CaCO.₃ deposition by poly amino acid derivatives

DATE-ISSUED: August 13, 1985

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Sikes; C. Steven	Mobile	AL		
Wheeler; Alfred P.	Clemson	SC		

US-CL-CURRENT: 252/180; 210/698, 252/175, 422/16, 930/290

ABSTRACT:

The present invention relates to a method of inhibiting the formation of CaCO.₃-containing deposits on a surface by applying a composition comprising an anti calcification-effective amount of a poly amino acid, a poly amino acid amide or derivative thereof. The present method is useful for the prevention and/or retardation (inhibition) of inorganic scaling, as well as for the inhibition of fouling by plant or animal organisms.

15 Claims, 0 Drawing figures
Exemplary Claim Number: 1

[Full](#) | [Title](#) | [Citation](#) | [Front](#) | [Review](#) | [Classification](#) | [Date](#) | [Reference](#) | [Claims](#) | [RQMD](#) | [Draw. De](#)

48. Document ID: US 4297137 A

L7: Entry 48 of 57

File: USPT

Oct 27, 1981

US-PAT-NO: 4297137

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Sachetto; Jean-Pierre	Saint-Julien-en-Genevois			FR
Cuccolo; Sergio	Geneva			CH

US-CL-CURRENT: 514/493; 106/156.1, 106/156.23, 106/157.8, 106/163.01, 106/203.1,
106/203.3, 106/204.01, 424/635, 424/638

ABSTRACT:

The invention relates to anti-fouling paints and is concerned with anti-fouling paints developed for inhibiting the fixation of marine organisms on structures which are immersed in sea water, the paints including at least one toxic substance uniformly incorporated into a discontinuous solid matrix which is insoluble in sea water and is dispersed in the paint, the matrix being at least partially formed from at least one substance which becomes soluble in sea water under the action of enzymes liberated by the marine organisms to be inhibited and/or by the bacterial film in contact with the surface of the paint.

The paints according to the invention provide an effective life which is much longer than that of the known anti-fouling paints.

The invention relates to an anti-fouling paint containing at least one toxic substance.

5 Claims, 0 Drawing figures
Exemplary Claim Number: 1

Full	Title	Citation	Front	Review	Classification	Date	Reference	Abstract	Claims	INPC	Drawn D
------	-------	----------	-------	--------	----------------	------	-----------	----------	--------	------	---------

49. Document ID: US 4237114 A

L7: Entry 49 of 57

File: USPT

Dec 2, 1980

US-PAT-NO: 4237114

DOCUMENT-IDENTIFIER: US 4237114 A

TITLE: Method and composition for the long term controlled release of a non-persistent organotin pesticide from an inert monolithic thermoplastic dispenser

DATE-ISSUED: December 2, 1980

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Cardarelli; Nathan F.	Barberton	OH		

other pest-life forms over a sustained period of time, by the gradual and continuous release of an organotin substance from an inert thermoplastic medium. The composition comprises an organotin of extremely low water solubility bound in an ethylene-vinyl acetate copolymer, or an ethylene-propylene copolymer, in which said organotin is insoluble and in which said organotin is uniformly dispersed with an inert co-leachant of moderate or low water solubility. When this formulation is brought into contact with water, the co-leachant gradually solvates into the water creating and enhancing the development of porosity within the thermoplastic phase. Said organotin agent, interspersed within the thermoplastic matrix, contacts the entering water and egresses as molecular aggregates being washed through the pore system and into the external watery medium. Such aggregates, being toxic to mosquito larva, other insects and various other pestiferous life forms upon continuous exposure, lead to a condition of terminal chronic intoxication.

70 Claims, 0 Drawing figures
Exemplary Claim Number: 1

Full	Title	Citation	Front	Review	Classification	Date	Reference	Abstract	Patent	Claims	EDOC	Draw. De
------	-------	----------	-------	--------	----------------	------	-----------	----------	--------	--------	------	----------

50. Document ID: US 4177256 A

L7: Entry 50 of 57

File: USPT

Dec 4, 1979

US-PAT-NO: 4177256

DOCUMENT-IDENTIFIER: US 4177256 A

TITLE: Osmotic bursting drug delivery device

DATE-ISSUED: December 4, 1979

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Michaels; Alan S.	San Francisco	CA		
Guillod; Mark S.	Kaneohe	HI		

US-CL-CURRENT: 424/427; 424/432, 424/473, 604/892.1

ABSTRACT:

A drug delivery for administering drug to an aqueous body environment at a substantially constant rate. The devices consist essentially of a mixture of drug of specific average particle size dispersed in a polymer of specific water permeability, tensile strength, and Young's modulus in specific volume proportions such that the particles are surrounded substantially individually by the polymer. The constancy of the release rate of drug from the devices is governed by the drug particle size and volume proportion of drug in the mixture.

12 Claims, 17 Drawing figures

51. Document ID: US 6342386 B1

L7: Entry 51 of 57

File: DWPI

Jan 29, 2002

DERWENT-ACC-NO: 2002-314624

DERWENT-WEEK: 200235

COPYRIGHT 2004 DERWENT INFORMATION LTD

TITLE: Removal of undesired growth on surfaces, such as floors, comprises coating surface with composition containing polymeric resin base material and microorganism capable of producing amylolytic and/or proteolytic enzyme

INVENTOR: LEAVITT, R I; POWERS, W P ; SELVIG, T A

PRIORITY-DATA: 1996US-0739272 (October 29, 1996), 1999US-0346535 (July 2, 1999)

PATENT-FAMILY:

PUB-NO	PUB-DATE	LANGUAGE	PAGES	MAIN-IPC
<u>US 6342386 B1</u>	January 29, 2002		016	A01N063/00

INT-CL (IPC): A01 N 63/00; A61 K 38/43; B09 B 3/00; C12 N 1/00; D06 M 16/00

ABSTRACTED-PUB-NO: US 6342386B

BASIC-ABSTRACT:

NOVELTY - Removing undesired growth on a surface comprising coating the surface with a composition containing a polymeric resin base material and at least one microorganism capable of producing amylolytic and/or proteolytic enzyme, is new.

USE - For preventing or minimizing fouling of marine markers, boat hulls, bulkheads, pilings, water inlets, floors, roofs and shingles.

ADVANTAGE - The method utilizing the marine anti fouling composition effectively reduces or prevents fouling of marine articles, reduces marine corrosion, reduces absorption of corrosive molecules. Therefore it impedes surface and inter-granular corrosion. The film formed by the application of composition reduces adsorption or attachment of mildew fungus on marine surfaces, retards growth of fouling microbe, and prevents accumulation of marine growth. The method minimizes blockage due to fouling of marine growth on heat exchangers, evaporator, condensers, and fire and flushing systems. Therefore it significantly reduces maintenance cost of all categories of marine structure. Aesthetic appearance of the marine structures are improved by coating the composition. The method reduces fouling without utilizing toxic materials, and effectively prevents environmental problems.

DESCRIPTION OF DRAWING(S) - The figure shows the plot of test results for upper tile panels and control coated with the anti fouling composition.

[Full](#) | [Title](#) | [Citation](#) | [Front](#) | [Review](#) | [Classification](#) | [Date](#) | [Reference](#) | [Claims](#) | [KOMC](#) | [Draw. D](#)

DERWENT-ACC-NO: 2002-121941

DERWENT-WEEK: 200219

COPYRIGHT 2004 DERWENT INFORMATION LTD

TITLE: New transgenic plants comprising a zosteric acid biosynthetic gene, a saline resistance gene or a hypoxia resistance gene derived from *Zostera marina*, useful for producing plants with antifouling traits

INVENTOR: ALBERTE, R S; SMITH, R ; SMITH, R D

PRIORITY-DATA: 2000US-202529P (May 10, 2000), 2001US-0854122 (May 10, 2001)

PATENT-FAMILY:

PUB-NO	PUB-DATE	LANGUAGE	PAGES	MAIN-IPC
<u>WO 200185971 A2</u>	November 15, 2001	E	117	C12N015/82
<u>AU 200159754 A</u>	November 20, 2001		000	C12N015/82
<u>US 20020016980 A1</u>	February 7, 2002		000	C12N015/82

INT-CL (IPC): A01 H 5/00; C12 N 9/02; C12 N 9/04; C12 N 9/10; C12 N 9/88; C12 N 15/29; C12 N 15/82

ABSTRACTED-PUB-NO: US20020016980A

BASIC-ABSTRACT:

NOVELTY - A new transgenic plant comprising a heterologous gene derived from a marine vascular plant, or at least one heterologous nucleotide sequence encoding a zosteric acid biosynthetic function, a saline-resistance function, or a hypoxia-resistance function.

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for the following:

(1) a nucleic acid comprising sequence (I) (not given in the specification), or a subsequence of at least 50 nucleotides of (I);

(2) a nucleic acid which hybridizes under stringent conditions to the nucleic acid of (I);

(3) producing a transgenic plant possessing an anti-fouling genetic trait by providing a cDNA population derived from a marine vascular plant, isolating from the cDNA population a nucleic acid species which hybridizes to a nucleic acid that encodes a sulfotransferase, a phenylalanine ammonium lyase or a cinnamate-4-hydroxylase activity, and transforming a target host plant with the isolated nucleic acid; and

(4) a transgenic plant created by the method.

USE - The plant is useful in the genetic engineering of plant species having desirable genetic traits such as antifouling traits, salt and anoxia resistance, and pathogen defense strategy. The expression of such biosynthetic enzymes are sufficient to support the production of zosteric acid and other sulfated phenolic compounds in a target plant.

ABSTRACTED-PUB-NO:

resistance function.

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for the following:

(1) a nucleic acid comprising sequence (I) (not given in the specification), or a subsequence of at least 50 nucleotides of (I);

(2) a nucleic acid which hybridizes under stringent conditions to the nucleic acid of (1);

(3) producing a transgenic plant possessing an anti-fouling genetic trait by providing a cDNA population derived from a marine vascular plant, isolating from the cDNA population a nucleic acid species which hybridizes to a nucleic acid that encodes a sulfotransferase, a phenylalanine ammonium lyase or a cinnamate-4-hydroxylase activity, and transforming a target host plant with the isolated nucleic acid; and

(4) a transgenic plant created by the method.

USE - The plant is useful in the genetic engineering of plant species having desirable genetic traits such as antifouling traits, salt and anoxia resistance, and pathogen defense strategy. The expression of such biosynthetic enzymes are sufficient to support the production of zosteric acid and other sulfated phenolic compounds in a target plant.

Full	Title	Citation	Effect	Reason	Classification	Date	Reference	Comments	Links	Claims	FIGAC	Drawn
------	-------	----------	--------	--------	----------------	------	-----------	----------	-------	--------	-------	-------

53. Document ID: NZ 515111 A, WO 200075293 A2, AU 200050978 A, BR 200010932 A, NO 200105831 A, KR 2002010153 A, US 20020106361 A1, CN 1364185 A, EP 1282669 A2, JP 2003525312 W, MX 2001012448 A1

L7: Entry 53 of 57

File: DWPI

Feb 27, 2004

DERWENT-ACC-NO: 2001-112148

DERWENT-WEEK: 200418

COPYRIGHT 2004 DERWENT INFORMATION LTD

TITLE: New anti-fouling composition, useful as a coating for treating different surfaces, e.g. outdoor woodwork, external surface of a central heating system, or a hull of a marine vessel

INVENTOR: KRAGH, K M; POULSEN, C H

PRIORITY-DATA: 1999GB-0013050 (June 4, 1999)

PATENT-FAMILY:

PUB-NO	PUB-DATE	LANGUAGE	PAGES	MAIN-IPC
<u>NZ 515111 A</u>	February 27, 2004		000	C12N009/00
<u>WO 200075293 A2</u>	December 14, 2000	E	036	C12N009/00
<u>AU 2000500278 A</u>	December 28, 2000		000	

<u>CN 1364185 A</u>	AUGUST 14, 2002		000	20020000, 10
<u>EP 1282669 A2</u>	February 12, 2003	E	000	C09D005/16
<u>JP 2003525312 W</u>	August 26, 2003		042	C09K003/00
<u>MX 2001012448 A1</u>	June 1, 2002		000	C12N009/00

INT-CL (IPC): A01 N 63/00; C02 F 1/00; C02 F 1/50; C08 L 89/00; C09 D 5/16; C09 D 7/12; C09 D 201/00; C09 K 3/00; C12 N 0/00; C12 N 9/00; C12 N 9/04; C12 N 9/34

ABSTRACTED-PUB-NO: US20020106361A

BASIC-ABSTRACT:

NOVELTY - A new anti-fouling composition comprises a surface coating material, an enzyme obtained or obtainable from a marine organism and a substrate for the enzyme, and/or a precursor enzyme and a precursor substrate.

DETAILED DESCRIPTION - A new anti-fouling composition comprises a surface coating material, an enzyme obtained or obtainable from a marine organism and a substrate for the enzyme, and/or a precursor enzyme and a precursor substrate. The precursor enzyme and the precursor substrate are selected so that a substrate for the enzyme is generated by action of the precursor enzyme on the precursor substrate. The enzyme and the substrate are selected so that an anti-foulant compound is generated by action of the enzyme on the substrate.

INDEPENDENT CLAIMS are also included for the following:

- (1) a coating consisting of the anti-fouling composition;
- (2) a marine anti-foul consisting of the composition; and
- (3) a method for releasing an anti-fouling compound from a surface coating comprising incorporating in a surface coating the anti-fouling composition above.

USE - The anti-fouling composition is useful as a coating formulated for treating a surface, e.g. outdoor wood work, external surface of a central heating system, or a hull of a marine vessel (claimed). It is also useful as an anti-fouling agent for marine structures exposed to seawater flora and fauna.

ADVANTAGE - The use of tributyl tin as marine anti-fouls has led to the pollution of surrounding water due to leaching which can cause the degradation of mussel and shell organisms. The use of the present anti-fouling composition is safer for the environment. It also has long term effectiveness in harsh environment, e.g. marine environment. It requires less substrate and less enzyme than prior art systems to provide a given anti-microbial effect. Furthermore, it has improved salt tolerance, which leads to further improved activity in marine environments, and is resistant to degradation by fouling.

ABSTRACTED-PUB-NO:

WO 200075293A EQUIVALENT-ABSTRACTS:

NOVELTY - A new anti-fouling composition comprises a surface coating material, an enzyme obtained or obtainable from a marine organism and a substrate for the enzyme, and/or a precursor enzyme and a precursor substrate.

by action of the enzyme on the substrate.

INDEPENDENT CLAIMS are also included for the following:

- (1) a coating consisting of the anti-fouling composition;
- (2) a marine anti-foul consisting of the composition; and
- (3) a method for releasing an anti-fouling compound from a surface coating comprising incorporating in a surface coating the anti-fouling composition above.

USE - The anti-fouling composition is useful as a coating formulated for treating a surface, e.g. outdoor wood work, external surface of a central heating system, or a hull of a marine vessel (claimed). It is also useful as an anti-fouling agent for marine structures exposed to seawater flora and fauna.

ADVANTAGE - The use of tributyl tin as marine anti-fouls has led to the pollution of surrounding water due to leaching which can cause the degradation of mussel and shell organisms. The use of the present anti-fouling composition is safer for the environment. It also has long term effectiveness in harsh environment, e.g. marine environment. It requires less substrate and less enzyme than prior art systems to provide a given anti-microbial effect. Furthermore, it has improved salt tolerance, which leads to further improved activity in marine environments, and is resistant to degradation by fouling.

Full	Title	Citation	Front	Review	Classification	Date	Reference	Abstract	Claims	FIGURES	Draw. D
------	-------	----------	-------	--------	----------------	------	-----------	----------	--------	---------	---------

54. Document ID: US 6048715 A

L7: Entry 54 of 57

File: DWPI

Apr 11, 2000

DERWENT-ACC-NO: 2000-328038

DERWENT-WEEK: 200028

COPYRIGHT 2004 DERWENT INFORMATION LTD

TITLE: Two-phase partition affinity separation system useful for separating and purifying proteins comprises a phase-forming oligosaccharide polymer and a phase-separation agent

INVENTOR: HAYNES, C A; KILBURN, D G ; TOMME, P

PRIORITY-DATA: 1996US-0685808 (July 24, 1996), 1988US-0216794 (July 8, 1988), 1990US-0603987 (October 25, 1990), 1992US-0865095 (April 8, 1992), 1994US-0249037 (May 24, 1994), 1995US-0505860 (July 24, 1995)

PATENT-FAMILY:

PUB-NO	PUB-DATE	LANGUAGE	PAGES	MAIN-IPC
<u>US 6048715 A</u>	April 11, 2000		046	C12N011/12

INT-CL (IPC): A23 J 1/00; C12 N 11/12; C12 N 15/00; C12 P 21/06

binding peptide (PBP), viruses and a phase separation inducing agent (B).

DETAILED DESCRIPTION - A two-phase partition system (I) for affinity separation, is new and comprises a phase-forming oligosaccharide polymer (A) selected from methyl cellulose, ethylhydroxyethyl cellulose, hydroxyethyl cellulose, to which a polysaccharide binding peptide (PBP) binds with a K_a of 103-107 M and a phase separation inducing agent (B) selected from polyethylene glycol, dextran, a copolymer of ethylene oxide and propylene oxide and a salt at a concentration of 3 M. (A) and (B) are present in amounts sufficient to induce phase separation upon mixing.

INDEPENDENT CLAIMS are also included for the following:

- (1) a composition, comprising a polypeptide which comprises a non-catalytic PBP bound to (A) and a cell having a carbohydrate residue on its surface to which PBP binds, obtained by contacting PBP with a cell to form a complex and contacting the complex with (I), where the complex partitions into first phase by binding to (A) and recovering the first phase; and
- (2) a composition (II) obtained by the same method as above, comprising a fusion polypeptide which comprises a non-catalytic PBP and a ligand bound to (A) and a cell having a receptor on its surface to which the ligand binds.

USE - (I) is useful for the separation and purification of proteins such as interleukin 2, factor X, ligninase and other compounds from cultured broth, biological fluids, tissue extracts, extracts from cell lysates including bacterial, fungal, plant, fish and fowl. (I) is also useful for concentrating a component in a mixture, cell separation, removing contaminants and for preparing solid state reagents for diagnostic assays, for targeting enzymes such as ligninase for treatment of wood chips and for bleaching of wood pulp. (I) can be used under high salt conditions such as in marine environment for anti-fouling of surfaces exposed to sea water.

ADVANTAGE - Oligosaccharide polymers can be obtained inexpensively and the water-soluble cellulosic substrates offer new, cost-effective, highly-flexible, affinity partition system for continuous purification. Selective binding of PBP from the oligosaccharide polymer makes it suitable for purification of a wide variety of compounds using a single oligosaccharide polymer phase separation system. Hence it is unnecessary to prepare separate systems for each compound to be separated. PBP compounds can be removed easily by elution with water.

Full	Title	Citation	Front	Review	Classification	Date	Reference	Claims	EDOC	Drawn	De
------	-------	----------	-------	--------	----------------	------	-----------	--------	------	-------	----

55. Document ID: GB 2306473 A, GB 2306473 B, JP 09118842 A, JP 09118844 A, JP 09124570 A, US 5770188 A

L7: Entry 55 of 57

File: DWPI

May 7, 1997

DERWENT-ACC-NO: 1997-229317

DERWENT-WEEK: 199902

COPYRIGHT 2004 DERWENT INFORMATION LTD

1995), 1995JP-0278718 (October 26, 1995)

PATENT-FAMILY:

PUB-NO	PUB-DATE	LANGUAGE	PAGES	MAIN-IPC
<u>GB 2306473 A</u>	May 7, 1997		029	C07C235/06
<u>GB 2306473 B</u>	December 23, 1998		000	C07C235/06
<u>JP 09118842 A</u>	May 6, 1997		006	C09D005/14
<u>JP 09118844 A</u>	May 6, 1997		005	C09D005/16
<u>JP 09124570 A</u>	May 13, 1997		004	C07C235/06
<u>US 5770188 A</u>	June 23, 1998		000	A61K031/74

INT-CL (IPC): A61 K 31/74; C07 C 235/06; C09 D 5/14; C09 D 5/16; C09 D 7/12; C09 D 101/00; C09 D 167/00; C12 N 9/00

ABSTRACTED-PUB-NO: GB 2306473A

BASIC-ABSTRACT:

Glucoxide derivatives for enzyme modification of formula (I) are new. R1, R2 = 6-20C hydrocarbon. Also claimed are: (1) a lipid-coated enzyme coated with (I) for enzyme modification; (2) production of lipid-coated enzymes comprising dissolving (I) in hydrophilic solvent and adding this solution dropwise into a buffer solution containing an enzyme; and (3) an anti-fouling paint composition comprising a lipid stable enzyme, stable in organic solvents as a result of coating with a lipid having 6-30C and a paint resin.

USE - (I) is useful for producing lipid-coated enzymes in antifouling paint compositions. Proteins and polysaccharides involved in the attachment of marine organisms can be degraded. Cell walls of attaching organisms may also be degraded.

ADVANTAGE - The paint resin used is enzyme-susceptible and can be degraded by the lipid-coated enzyme, to form a self-polishing antifouling composition.

ABSTRACTED-PUB-NO:

GB 2306473B EQUIVALENT-ABSTRACTS:

Glucoxide derivatives for enzyme modification of formula (I) are new. R1, R2 = 6-20C hydrocarbon. Also claimed are: (1) a lipid-coated enzyme coated with (I) for enzyme modification; (2) production of lipid-coated enzymes comprising dissolving (I) in hydrophilic solvent and adding this solution dropwise into a buffer solution containing an enzyme; and (3) an anti-fouling paint composition comprising a lipid stable enzyme, stable in organic solvents as a result of coating with a lipid having 6-30C and a paint resin.

USE - (I) is useful for producing lipid-coated enzymes in antifouling paint compositions. Proteins and polysaccharides involved in the attachment of marine organisms can be degraded. Cell walls of attaching organisms may also be degraded.

ADVANTAGE - The paint resin used is enzyme-susceptible and can be degraded by the lipid-coated enzyme, to form a self-polishing antifouling composition.

US 5770188A

having 6-30C and a paint resin.

USE - (I) is useful for producing lipid-coated enzymes in antifouling paint compositions. Proteins and polysaccharides involved in the attachment of marine organisms can be degraded. Cell walls of attaching organisms may also be degraded.

ADVANTAGE - The paint resin used is enzyme-susceptible and can be degraded by the lipid-coated enzyme, to form a self-polishing antifouling composition.

Full Title Citation Front Review Classification Date Reference       

□ 56. Document ID: US 2882213 A

L7: Entry 56 of 57

File: USOC

Apr 14, 1959

US-PAT-NO: 2882213

DOCUMENT-IDENTIFIER: US 2882213 A

TITLE: Galvanic anode

DATE-ISSUED: April 14, 1959

INVENTOR-NAME: BURKE DOUGLAS

INVENTOR-NAME: BURKE DOUGLAS

US-CL-CURRENT: 204/196.19; 204/196.2, 204/290.05

Full | Title | Citation | Front | Review | Classification | Date | Reference | | | | | | | | |

□ 57. Document ID: US 2855358 A

L7: Entry 57 of 57

File: USOC

Oct 7, 1958

US-PAT-NR: 2855358

DOCUMENT-IDENTIFIER: US 2855358 A

TITLE: Galvanic anode

DATE-ISSUED: October 7, 1958

INVENTOR-NAME: BURKE DOUGLAS

US-CL-CURRENT: 204/196.19; 2

55 SE CURRENT: 204/190.15, 204/190.2, 204/290.05

Full | Home | Citation | Front | Review | Classification | Date | Reference |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | <img alt="Search icon" data-bbox="8878

Display Format: -

[Previous Page](#) [Next Page](#) [Go to Doc#](#)